REMARKS

Claims 1-11 are all the claims pending in the application. Examiner is thanked for carefully reviewing the present application. The present amendment is in response to the first Office Action dated on January 10, 2005 and the Advisory Action dated March 30, 2005 regarding claims 1-11.

Claim 1 is amended to particularly point out that the second plate directly contacts the first post or the second post, and shifts along the first post towards the operating plate or shifts along the second post towards the first plate. Support for this amendment can be found in Fig. 5A and the related description of the specification. Claim 1 is further amended to indicate that the second plate can be parallel or unparallel to the first plate and the operating plate, since the second plate is **deformable** (see page 4 lines 11-12 of the specification), meaning that the **deformable** second plate may or may not be in parallel with the first plate and the operating plate after moving along the posts. Thus, claims 1-11 are now pending in the application. The amended claim contains no new matter and does not raise new issues.

Claim Rejections under 35 U.S.C. §103(a)

Claims 1-5 and 7-11 are rejected under 35 U.S.C. § 103(a), as being unpatentable by Miles (US 6,650,455; hereinafter referred to as Miles '455) in view of Miles (US 6,674,562; hereinafter referred to as Miles '562). Claim 6 is rejected under 35 U.S.C. § 103(a), as being unpatentable by Miles '455 in view of Miles '562 and further in view of Huibers (US 6,172,797). As will be fully explained below, these rejections are respectfully traversed.

As explicitly recited in claim 1 of the claimed invention, the first plate, the second plate and the operating plate are supported by directly contacting the first and second posts (see 512 and 508 in Fig. 5A, and the related description of the specification). As shown in Fig. 5B, by using a voltage added on the operating plate, the second plate can shift along the first post to move towards the operating plate, or shift along the second post to move towards the first plate, so as to change the distance of the cavity. The distance (length) of the cavity can be approximately from 0 to the distance between the operating plate and the first plate.

By contrast, in the Miles' 455 structure, an optical cavity 505 is formed between the membrane/mirror 506 (second plate) and the secondary mirror 508 (first plate), and support for the secondary mirror 508 (first plate) is provided by a transparent superstructure 510 (see column 9 lines 14-16). As shown in Fig. 5A and Fig. 5B, Miles' membrane/mirror 506 is formed as an inverted-U shape on the substrate 500, and the membrane/mirror 506 is vertically displaced when a voltage applied between primary electrode 502 and membrane mirror 506, thus changing the length of the optical cavity (see Fig. 5B and column 9 lines 35-38). The length of optical cavity can be approximately from the height of the secondary mirror 508 (first plate) minus the original height of the membrane/mirror 506 (second plate), to the distance between the secondary mirror 508 (first plate) and the insulating film 504 (working plate).

The Examiner admits that Miles' 455 does not specifically disclose at least one first post and at least one second post, as set forth in the claimed invention, particularly wherein the second plate shifts along the first and second posts. Examiner stated that Miles' 562 has taught the aforementioned first and second posts of the claimed invention.

However, as shown in Fig. 3A of Miles' 562, the conducting membrane 302 (second plate) and shield membrane 300 (first plate) are connected to supporting post via **tethers** 306 (not shown in the description related to Fig. 3A, but should be similar to tethers 102 and supporting posts 104 shown in Fig. 1B). As shown in Fig. 3C, the conducting membrane 302 (second plate) can be actuated to come into contact with a membrane 304 (operating plate; states 1 and 2), and the shield membrane 300 (first plate) can be actuated to come into contact with the conducting membrane 302 (states 2). In this manner, the movements of the shield membrane 300 and conducting membrane 302 are provided by the elastic property of the **tethers** 306. Apparently, the conducting membrane 302 (second plate) can only be pulled downwards toward the lower potion of the supporting post (the first post), and cannot shift along the second post or along both the first and second posts, as set forth in the claimed invention. Therefore, the connecting mechanism of Miles' 562 is different from that of the claimed invention, thereby causing different movements of the second plate. Accordingly, there is a different configuration of the first, second and operating plates from those of the claimed invention. Accordingly, Miles' 562 does not teach or suggest the connection structure between the first/second posts and

the first/second/operating plates as recited in claim 1, and particularly, and Miles' 562 does not teach or suggest the mechanism of allowing the conducting membrane 302 (second plate) to shift along the second post. Therefore, claim 1 is non-obvious over Miles '455 in view of Miles '562.

Likewise, by virtue of their dependence on patentable claim 1 respectively, claims 2-11 are also nonobvious and patentable over the above-identified prior arts. Accordingly, the applicants respectfully request that the section 103(a) rejections be withdrawn.

With regard to claim 7, Miles '455 merely indicates that the first plate and the second plate are metal mirrors, but fails to teach the first plate and the second plate can be narrowband mirror, broadband mirror or non-metal mirror. Therefore, claim 7 is nonobvious and patentable over Miles '455 in view of Miles '562.

With regard to claim 11, Miles '455 merely indicates that the second plate is a thin metal, but fails to teach the semi-transparent material in the second plate can be ITO or IZO. Therefore, claim 11 is nonobvious and patentable over Miles '455 in view of Miles '562.

With regard to claim 6, Huibers merely indicates that a layer of ITO is added to the substrate, but fails to teach the substrate is made from IZO. Therefore, claim 6 is nonobvious and patentable over Miles '455 in view of Miles '562 and further in view of Huibers.

Therefore, the applicants respectfully request that the section 103(a) rejection be withdrawn.

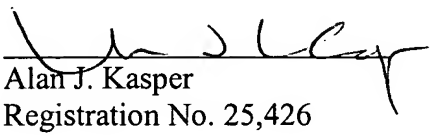
CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. The applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If there are any remaining issues to be resolved, the applicants request that the Examiner contact the undersigned attorney for a telephone interview.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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